

Supplementary Figure S3 (A) - Boloc et al, PLoS One, 2015. RP genes pair-wise connectivity (all)

Each of the diagrams show the pair-wise connectivity between RP genes or proteins from the interaction network generated, where d corresponds to the distance for the shortest directed path across the network between the pair of connected RP genes—maximum distance found was of 6 edges (or five internal nodes between the two RP genes)—. The last plot summarizes all the previous diagrams, showing all the possible connections among pairs of RP genes at different distances. On the outer ring we have depicted the standard symbols for the 110 RP genes used to build the network, they were sorted by the number of incoming connections, then by the outcoming ones. Each of the RP genes found to interact with other RP genes has a distinct color box, while those genes for which there was not interaction found are shown in black. The color boxes have two halves: one lighter grouping all the outgoing connections—so there is a directed path from current gene node—, and one darker gathering all the incoming connections—meaning that there is a directed path to current gene node—. By making this difference it is easy to spot genes that are upstream of many in the network—like CLRN1, RD3, RP1L1, and SPATA7—, mainly downstream of others-like ABHD12, ROM1, EMC1, and C8orf37-, or even internal hubs—like PEX1, IQCB1, CERKL, CRX and RP2—. All diagrams made using $Circos^1$.



¹Krzywinski et al. "Circos: An information aesthetic for comparative genomics." Genome Research, 19(9):1639-1645, 2009.



Supplementary Figure S3 (B) - Boloc et al, *PLoS One, 2015.* RP genes pair-wise connectivity (non-syndromic)

Each of the diagrams show the pair-wise connectivity between RP genes or proteins from the interaction network generated, where d corresponds to the distance for the shortest directed path across the network between the pair of connected RP genes—maximum distance found was of 6 edges (or five internal nodes between the two RP genes)—. The last plot summarizes all the previous diagrams, showing all the possible connections among pairs of RP genes at different distances. On the outer ring we have depicted the standard symbols for the 75 non-syndromic RP genes used to build the network, they were sorted by the number of incoming connections, then by the outcoming ones. Each of the RP genes found to interact with other RP genes has a distinct color box, while those genes for which there was not interaction found are shown in black. The color boxes have two halves: one lighter grouping all the outgoing connections—so there is a directed path from current gene node—, and one darker gathering all the incoming connections—meaning that there is a directed path to current gene node—. By making this difference it is easy to spot genes that are upstream of many in the network—like RD3, RP1L1, and SPA-TA7—, mainly downstream of others—like ROM1, EMC1, and C8orf37—, or even internal hubs—like CERKL, CRX and RP2—. All diagrams made using $Circos^1$.



¹Krzywinski *et al.* "Circos: An information aesthetic for comparative genomics." *Genome Research*, 19(9):1639–1645, 2009.











Supplementary Figure S3 (C) - Boloc et al, *PLoS One*, 2015.

RP genes pair-wise connectivity (syndromic)

Each of the diagrams show the pair-wise connectivity between RP genes or proteins from the interaction network generated, where d corresponds to the distance for the shortest directed path across the network between the pair of connected RP genes—maximum distance found was of 4 edges (or three internal nodes between the two RP genes)—

. The last plot summarizes all the previous diagrams, showing all the possible connections among pairs of RP genes at different distances. On the outer ring we have depicted the standard symbols for the 35 syndromic RP genes used to build the network, they were sorted by the number of incoming connections, then by the outcoming ones. Each of the RP genes found to interact with other RP genes has a distinct color box, while those genes for which there was not interaction found are shown in black. The color boxes have two halves: one lighter grouping all the outgoing connections—so there is a directed path from current gene node—, and one darker gathering all the incoming connections—meaning that there is a directed path to current gene node—. By making this difference it is easy to spot genes that are upstream of many in the network—like CLRN1—, mainly downstream of others—like ABHD12— , or even internal hubs—like PEX1 or IQCB1-- . All diagrams made using $Circos^1$.



¹Krzywinski *et al.* "Circos: An information aesthetic for comparative genomics." *Genome Research*, 19(9):1639–1645, 2009.